What is claimed is:

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1. A semiconductor device with a bipolar transistor comprising:

a first conductivity type semiconductor layer serving as a collector region;

a base region constituted of a second conductivity type region provided in said first conductivity type semiconductor layer;

an emitter region constituted of a first conductivity region provided in said base region; and

a base contact section provided oppositely from said emitter region in said base region, electrically connected to a base electrode,

wherein said base contact section is constructed of a repeating structure in a plan view, in which a high impurity concentration region of the second conductivity type and a region of the first conductivity type are arranged in an alternate manner from a side of said emitter region.

2. A semiconductor device with a bipolar transistor comprising:

a first conductivity type semiconductor layer serving as a collector region;

a base region constituted of a second conductivity type region provided in said first conductivity type semiconductor layer;

an emitter region constituted of a first conductivity region provided in said base region; and

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a base contact section provided oppositely from said emitter region in said base region, electrically connected to a base electrode,

wherein said base contact section is constructed of a repeating structure in a plan view, in which a high impurity concentration region of the second conductivity type and a region of the second conductivity type constituting said base region arranged in an alternate manner from a side of said emitter region.

3. A semiconductor device according to claim 1 or 2, wherein said emitter region comprises a plurality of stripe regions and said base contact section comprises a plurality of contact sections formed along each of said plurality of stripe regions in said base region between said plurality of stripe regions.

4. A semiconductor device according to claim 1 or 2, wherein said base region comprises a plurality of regions exposed in a matrix pattern in said emitter region and said base contact section comprises a plurality of contact sections formed at each of a plurality of regions of said base region exposed in the matrix pattern.

5. A semiconductor device according to claim 3 or 4, wherein an emitter electrode connected to said emitter region and a base electrode connected to said base contact section are formed in respective comb structures in which teeth of said emitter electrode and said base electrode are engaged with each other being alternately arranged.

6. A semiconductor device according to claim 1 or 2, wherein said emitter region comprises a plurality of stripe regions and said stripe regions are formed so as to expose said base region at respective central portions of said stripe regions and an emitter electrode is formed, being connected to said stripe regions, so as to cover exposed portions of said base region via an insulating film.

7. A semiconductor device according to claim 6, wherein said base region exposed at the central portion of each of said stripe regions is segmented into a plurality along a direction of the stripe.

8. A semiconductor device according to claim 6, wherein said base region exposed at the central portion of each of said stripe regions is provided such that each of said stripe regions is segmented along a direction of the stripe and said emitter electrode is formed over the two segmented stripe regions and said base region exposed therebetween.

9. A semiconductor device with a bipolar transistor comprising:

a first conductivity type semiconductor layer serving as a collector region;

a base region constituted of a second conductivity type region provided in said first conductivity type semiconductor layer;

an emitter region constituted of a first conductivity region provided in said base region; and

a base contact section provided oppositely from said emitter region in said base region, electrically connected to a base electrode,

wherein said emitter region comprises a plurality of stripe regions and said stripe regions are formed so as to expose said base region at respective central portions of said stripe regions and an emitter electrode is formed, being connected to said stripe regions, so as to cover exposed portions of said base region.

10. A semiconductor device according to claim 9, wherein said base region exposed at the central portion of each of said stripe regions is segmented into a plurality along a direction of the stripe.

11. A semiconductor device according to claim 9, wherein said base region exposed at the central portion of each of said stripe regions is provided such that each of said stripe regions is segmented along a direction of the stripe and said emitter electrode is formed over the two segmented stripe regions and said base region exposed therebetween via an insulating film.